

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An interface comprising:

716 a plurality of input/output (I/O) ports, each configured and arranged to pass a corresponding input signal and a corresponding push-to-transmit (PTT) command; and

a corresponding plurality of voice-operated-transmit (VOX) circuits, each configured and arranged to receive the corresponding input signal and to produce, according to a predetermined relation between a level of the input signal and a corresponding threshold, a corresponding channel activation signal;

a switching matrix configured and arranged to receive the plurality of input signals and channel activation signals,

wherein the plurality of VOX circuits is further configured and arranged to prevent, during a period of assertion of a channel activation signal to the switching matrix, assertion of any other of the plurality of channel activation signals to the switching matrix, and

wherein each among the plurality of VOX circuits is further configured and arranged to assert the corresponding PTT command to the corresponding I/O port when a noncorresponding channel activation signal is asserted; and

wherein the switching matrix is further configured and arranged to produce an output signal based on an input signal corresponding to an asserted channel activation signal and to provide the output signal at least to the I/O ports corresponding to a nonasserted channel activation signal.

2. (Original) The interface according to claim 1, wherein the plurality of VOX circuits is further configured and arranged to inhibit an assertion of any among the channel activation signals to the switching matrix during a powering-up of the interface.

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3. (Original) The interface according to claim 1, wherein each among the plurality of VOX circuits is further configured and arranged to receive an initialization signal during a powering-up of the interface and to inhibit an assertion of the corresponding channel activation signal to the switching matrix according to the initialization signal.

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4. (Currently amended) The interface according to claim 1, wherein the initialization signal is based on a transient level of a voltage of a power supply of the interface.

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5. (Original) The interface according to claim 1, wherein at least one among the plurality of VOX circuits is configured and arranged to determine a level of the input signal over a frequency range of 100 Hertz to 500 Hertz and to produce the corresponding channel activation signal according to a predetermined relation between the determined level and a corresponding threshold.

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6. (Original) The interface according to claim 1, wherein at least one among the plurality of VOX circuits is configured and arranged to determine a level of the input signal over a frequency range centered at a frequency between 100 and 150 Hertz and to produce the corresponding channel activation signal according to a predetermined relation between the determined level and a corresponding threshold.

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7. (Currently Amended) The interface according to claim 1, wherein the switching matrix is further configured and arranged to produce a quiet output signal, the quiet output signal having a voltage level at least one-quarter of a power supply voltage of the interface, and to provide the quiet output signal at least to an I/O port corresponding to an asserted channel activation signal.

8. (Not Entered)

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8. (Original) The interface according to claim 1, said interface further comprising a supply voltage sensor configured and arranged to indicate a predetermined relation between a supply voltage of the interface and a predetermined threshold voltage.

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10. (Currently Amended) The interface according to claim 1, said interface further comprising a plurality of supply voltage sensors, each configured and arranged to indicate a predetermined relation between a supply voltage of the interface and a corresponding predetermined threshold voltage,

wherein an indication by ~~the~~ a supply voltage sensor having ~~the~~ a lower threshold voltage is suppressed during an indication by ~~the~~ a supply voltage sensor having ~~the~~ a higher threshold voltage.

11. (Canceled)

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12. (New) The interface according to claim 1, wherein said switching matrix includes a common bus and a plurality of switches,

wherein each of the plurality of switches is configured to switch a signal based on a corresponding input signal onto the common bus, according to the state of a corresponding channel activation signal.

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13. (New) An interface comprising:

a plurality of voice-operated-transmit (VOX) circuits, each configured and arranged to receive a corresponding input signal and to produce, according to a predetermined relation between a level of the input signal and a corresponding threshold, a corresponding channel activation signal;

Alb wherein the plurality of VOX circuits is configured and arranged to prevent, during a period of assertion of a channel activation signal, assertion of any other of the plurality of channel activation signals, and

wherein each among the plurality of VOX circuits is further configured and arranged to assert a corresponding push-to-transmit command when a noncorresponding channel activation signal is asserted.

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~~14.~~ (New) The interface according to claim ¹¹~~12~~, wherein each VOX circuit is coupled to a common control bus and is configured to assert the corresponding push-to-transmit command according to a state of the common control bus.

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~~15.~~ (New) The interface according to claim ¹¹~~13~~, wherein each VOX circuit is configured to inhibit activation of a corresponding push-to-transmit signal during activation of the corresponding channel activation signal.

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~~16.~~ (New) The interface according to claim ¹¹~~13~~, wherein the plurality of VOX circuits is further configured and arranged to inhibit an assertion of any among the channel activation signals during a powering-up of the interface.

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~~17.~~ (New) The interface according to claim ¹¹~~13~~, wherein at least one of the plurality of VOX circuits is configured to continue to assert the corresponding channel activation signal for a period not longer than several seconds after the predetermined relation no longer exists.

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~~18.~~ (New) The interface according to claim ¹¹~~13~~, wherein the interface is configured to switch, according to a state of a channel activation signal, a signal based on the corresponding input signal onto a common bus.

²³~~18~~. (New) The interface according to claim ¹⁶~~18~~, wherein each VOX circuit is coupled to a corresponding output port, and

wherein the interface is configured to provide a signal based on the common bus to each output port corresponding to a nonasserted channel activation signal.

²⁵~~20~~. (New) The interface according to claim ²³~~18~~, wherein, for one of the plurality of VOX circuits, the interface is configured to provide a signal based on the input signal corresponding to the VOX circuit to the output ports corresponding to each of the rest of the plurality of VOX circuits, and

wherein, for another of the plurality of VOX circuits, the interface is configured to provide a signal based on the input signal corresponding to the VOX circuit only to the output ports corresponding to each of fewer than all of the rest of the plurality of VOX circuits.

¹⁷~~21~~. (New) The interface according to claim ¹¹~~13~~, wherein each VOX circuit is coupled to a corresponding output port, and

wherein the interface is configured to provide a nonnull voltage to an output port corresponding to an asserted channel activation signal.

¹⁶~~22~~. (New) The interface according to claim ¹¹~~13~~, wherein at least one of the plurality of VOX circuits is configured to produce a corresponding channel activation signal based on a level of the input signal over a frequency range including at least a portion of the range from 100 Hertz to 210 Hertz.

¹⁹~~23~~. (New) The interface according to claim ¹¹~~13~~, wherein at least one of the plurality of VOX circuits is configured to produce a corresponding channel activation signal based on a level of the input signal over a frequency range centered at a frequency between 100 and 150 Hertz.

A16 ²⁰24. (New) The interface according to claim ¹¹~~13~~, wherein at least one of the plurality of VOX circuits is configured to produce the corresponding channel activation signal based on the energy content of the corresponding input signal in a plurality of different frequency bands.

²¹25. (New) The interface according to claim ¹¹~~13~~, wherein at least one of the plurality of VOX circuits is configured to produce the corresponding channel activation signal based on a band-limited portion of the corresponding input signal.

²²26. (New) The interface according to claim ¹¹~~13~~, wherein the interface is configured to provide at least one of the push-to-transmit signals over a radio-frequency link.

²⁴27. (New) The interface according to claim ²²~~26~~, wherein the interface is configured to provide at least one of the push-to-transmit signals over a Bluetooth radio-frequency link.

²⁶28. (New) An interface comprising:

a plurality of voice-operated-transmit (VOX) circuits, each configured and arranged to receive a corresponding input signal and to produce, according to a predetermined relation between a level of the input signal and a corresponding threshold, a corresponding channel activation signal;

wherein the plurality of VOX circuits is configured and arranged to prevent, during a period of assertion of a channel activation signal, assertion of any other of the plurality of channel activation signals, and

wherein each among the plurality of VOX circuits is further configured and arranged to inhibit assertion of a corresponding push-to-transmit command when the corresponding channel activation signal is asserted.

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~~29~~. (New) The interface according to claim ~~28~~, wherein each VOX circuit is coupled to a common control bus and is configured to assert the corresponding push-to-transmit command according to a state of the common control bus.

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~~30~~. (New) The interface according to claim ~~28~~, wherein the plurality of VOX circuits is further configured and arranged to inhibit an assertion of any among the channel activation signals during a powering-up of the interface.

29²⁶
~~31~~. (New) The interface according to claim ~~28~~, wherein at least one of the plurality of VOX circuits is configured to continue to assert the corresponding channel activation signal for a period not longer than several seconds after the predetermined relation no longer exists.

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~~32~~. (New) The interface according to claim ~~28~~, wherein the interface is configured to switch, according to a state of a channel activation signal, a signal based on the corresponding input signal onto a common bus.

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~~33~~. (New) The interface according to claim ~~32~~, wherein each VOX circuit is coupled to a corresponding output port, and

wherein the interface is configured to provide a signal based on the common bus to each output port corresponding to a nonasserted channel activation signal.

39³⁷
~~34~~. (New) The interface according to claim ~~33~~, wherein, for one of the plurality of VOX circuits, the interface is configured to provide a signal based on the input signal corresponding to the VOX circuit to the output ports corresponding to each of the rest of the plurality of VOX circuits, and

wherein, for another of the plurality of VOX circuits, the interface is configured to provide a signal based on the input signal corresponding to the VOX circuit only to the output ports corresponding to each of fewer than all of the rest of the plurality of VOX circuits.

Alb
31²⁶ 38. (New) The interface according to claim 28, wherein each VOX circuit is coupled to a corresponding output port, and

wherein the interface is configured to provide a nonnull voltage to an output port corresponding to an asserted channel activation signal.

32²⁶ 36. (New) The interface according to claim 28, wherein at least one of the plurality of VOX circuits is configured to produce a corresponding channel activation signal based on a level of the input signal over a frequency range including at least a portion of the range from 100 Hertz to 210 Hertz.

33²⁶ 37. (New) The interface according to claim 28, wherein at least one of the plurality of VOX circuits is configured to produce a corresponding channel activation signal based on a level of the input signal over a frequency range centered at a frequency between 100 and 150 Hertz.

34²⁶ 38. (New) The interface according to claim 28, wherein at least one of the plurality of VOX circuits is configured to produce a corresponding channel activation signal based on the energy content of the corresponding input signal in a plurality of different frequency bands.

35²⁶ 39. (New) The interface according to claim 28, wherein at least one of the plurality of VOX circuits is configured to produce a corresponding channel activation signal based on a band-limited portion of the corresponding input signal.

³⁶~~40~~. (New) The interface according to claim ²⁶~~28~~, wherein the interface is configured to provide at least one of the push-to-transmit signals over a radio-frequency link.

³⁶~~40~~. (New) The interface according to claim ³⁶~~40~~, wherein the interface is configured to provide at least one of the push-to-transmit signals over a Bluetooth radio-frequency link.

⁴⁰~~42~~. (New) An interface comprising:
a plurality of means for outputting a corresponding channel activation signal based on a predetermined relation between a level of a corresponding input signal and a corresponding threshold,

wherein the plurality of means for outputting is configured and arranged to prevent, during a period of assertion of a channel activation signal, assertion of any other of the plurality of channel activation signals, and

wherein each among the plurality of means for outputting is further configured and arranged to assert a corresponding push-to-transmit command when a noncorresponding channel activation signal is asserted.